[JOINT COMMITTEE PRINT]

STUDY OF 1983 EFFECTIVE TAX RATES OF SELECTED LARGE U.S. CORPORATIONS

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

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LETTER REQUESTING STUDY

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, DC, March 8, 1984.

Mr. DAVID H. BROCKWAY,
Chief of Staff, Joint Committee on Taxation,
Longworth House Office Building, Washington, DC.

DEAR MR. BROCKWAY: Once again, I am requesting the Joint Committee on Taxation to prepare an annual report on the overall United States and worldwide tax burdens of U.S. corporations.

I, and Congressman Byron Dorgan, who has joined with me in commissioning this study, look forward to the results of this year's report and to receiving further information on the declining effective rate of taxation for U.S. companies.

Last year's report was instrumental in formulating my amendment to H.R. 4170 to raise revenue to meet the budget resolution revenue target for Fiscal Year 1984.

I am very pleased with the high quality of the committee's work and want to thank you for the fine job you are doing.

Sincerely yours,

DON J. PEASE

PEASE-DORGAN CORPORATE TAX RATE STUDY

INTRODUCTION

This study presents 1983 effective corporate income tax rates, by industry. It is based on the annual reports of selected large corporations within each industry. It includes a comparison of 1983 effective tax rates with prior years' rates. Effective tax rates, the ratios of income tax expense to income before tax, are computed for each company studied; the industry rate is then computed from the weighted average of the tax rates for the companies within the industry.

In annual financial statements corporations disclose net income before tax, income tax expense and net income after tax. The income tax expense (or provision for taxes) is separated into two parts—current and deferred. Current income tax expense represents taxes currently payable; deferred income tax expense is treated as a current year's expense for financial reporting purposes, but it represents a liability for taxes which will be payable in some future year or years. Deferred taxes generally result from differences in the timing of income recognition or deductions allowed under the rules for computing book income and those for computing taxable income. Cost recovery deductions for equipment are an example of such an item.

In this study, tax rates are computed by comparing reported current tax expense with net income before tax. This approach differs from other studies which compute effective tax rates from tax returns by matching the taxes paid with the income on which the tax is imposed. The difference between these approaches arises because income is not necessarily reported on financial statements in the same period as the taxes imposed on that income. Because this study compares current tax expense with net income before tax as reported to shareholders, it does not address the complex problems that arise when taxes paid are matched with the income on which the tax is imposed.

Taxes paid are measured by current tax expense rather than by the total provision for taxes because deferred taxes often roll over from one year to the next, and in a period of growth or inflation are paid, if ever, in the distant future. The actual burden of each dollar of deferred tax liability, therefore, is less than the actual burden of each dollar of current tax liability and will depend upon the period of deferral and prevailing interest rates. In effect, by assuming that deferred taxes represent zero tax liability, the true tax burden is understated to the extent that the present value of the deferred tax liability is positive (i.e., to the extent that some tax will be paid in the future). Primarily because of this treatment of deferred taxes, the tax rates in this study differ from those in corporate financial statements or from studies of effective tax rates

computed from published data which exclude no, or only a portion of, deferred taxes from the measure of taxes used to compute the tax rate.

Where data to separate foreign and domestic earnings are available, a foreign tax rate on foreign income and a U.S. rate on U.S. income are computed in addition to the worldwide rate on worldwide income.

In some instances an effective tax rate is not shown for an industry because, for a number of reasons, the rate may be misleading. Generally, rates are not shown when there is an aggregate book loss or when rates are clearly abnormal.

This report covers 218 companies selected from the Fortune 500 Industrials and the Fortune Service 500. Industrials are grouped, generally, by the Standard Industrial Classification Code numbers (SIC Codes). Each company is included in the industry or service group which represents the greatest volume of sales for that company; the companies are, in most cases, the largest companies in the industry. A few exceptions to this method of selection and classification of companies were made to provide additional groupings that we consider useful (e.g., mining and construction).

A brief summary of the methodology follows in Part I, with a more detailed discussion of the methodology in Appendix A. The corporations included in each industry group are listed in Appendix B.

Part II of the study is a discussion of the results of the study, and includes six tables of data. Worldwide, U.S. and foreign effective tax rates for 1983 are shown in Table 1. Table 2 shows the 1980, 1981. 1982, and 1983 U.S. effective tax rates, and a 4-year rate (1980-1983) for those industries where the data are available. Table 3 shows the equivalent worldwide effective tax rates for 1980 through 1983. Table 4 shows average effective tax rates for all companies for the period 1980 through 1983. Table 5 shows a comparison of effective tax rates computed from annual reports for 1981 with effective tax rates computed from income tax return data. Table 6 shows Federal Government receipts, by category, for the period 1950-1983.

In this report, effective tax rates are generally discussed on an industry-by-industry basis. However, the results of particular companies within an industry are discussed in some cases where the industry group is dominated by one company, or where the results of one company are illustrative of the industry as a whole.

This study was prepared at the request of Congressmen Donald J. Pease (Ohio) and Byron L. Dorgan (North Dakota) by the staff of the Joint Committee on Taxation, with the assistance of staff from the U.S. General Accounting Office.[1]

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[1] A pamphlet entitled, *Study of 1982 Effective Tax Rates of Selected Large U.S. Corporations* was prepared by the Joint Committee staff at the request of Congressmen Pease and Dorgan (henceforth called the 1982 Pease-Dorgan Study), November 14, 1983, Joint Committee Print JCS-57-83. A Corporate Tax Study of 1981 tax rates was prepared the previous year by the Joint Committee Staff at the request of Congressmen Pease and Dorgan (henceforth called the 1981 Pease-Dorgan Study), 128 Cong. Rec., H 10545, 153—Part II (daily ed. Dec. 20, 1982) (Remarks by Rep. Pease).

I. METHODOLOGY

In general, this study compares current income tax expense with net income before taxes as reported in financial statements. To provide a better basis for comparing the tax rates of different industries, however, some adjustments are made to reported income and income tax expense. These adjustments are outlined below. A technical discussion of the methodology is included in Appendix A.

Adjustments

Consolidation of subsidiaries

Net income per financial statements is adjusted to include the income or loss attributable to minority interests.

Equity accounting for investments in affiliates and joint ventures

Typically, the parent corporation's provision for income taxes does not include the tax attributable to the parent's equity in the net income or loss of the affiliate or joint venture. In this case, the equity income or loss is eliminated from the net income of the parent.

Extraordinary items and discontinued operations

The profit or loss from extraordinary items and discontinued operations, which is reported separately, is excluded from income; similarly the current tax expense (or savings) attributable to extraordinary items or discontinued operations is excluded from the total current tax expense.

State taxes

Income is reduced by the current portion of State or local income tax expense. The current income tax expense is adjusted to eliminate the current portion of State or local income tax expense.

Computation of tax rates

Tax rates are computed by dividing the adjusted worldwide, foreign and U.S. current income tax expense by adjusted worldwide, foreign and U.S. income before tax, respectively. For those companies which do not disclose foreign earnings from their foreign operations, only the rate of worldwide tax on worldwide income is determinable. If, however, it seems reasonable to assume that income from foreign operations is minimal, then all income is treated as U.S. income.[2]

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[2] This methodology differs from that used by the staff in similar studies in years prior to 1982. In the 1981 Pease-Dorgan Study, if foreign tax was disclosed but the amount of foreign income

Continued

Companies with losses are included in the computation of aggregate tax rates for an industry because refunds due when there is a loss reduce the industry's tax burden; moreover, in some cases, current tax expense is positive even when there is a book loss, and this tax expense should also be reflected in the industry's total tax burden. This method of aggregation differs from the method used by the staff in the 1981 Pease-Dorgan study, when loss companies were excluded from the computation of aggregate rates. The tax rates for 1980 and 1981 (as shown in tables 2, 3 and 5) have been restated to reflect this change in method.

In some circumstances effective tax rates are not shown for an industry because they may be misleading. First, the sign (positive or negative) of the rate could misrepresent the underlying situation. Usually a positive rate means a tax expense and a negative rate a tax refund. But positive or negative rates can arise in other situations. For example, when there is a book loss and current tax expense is negative, the effective tax rate would be positive and, therefore, would appear to be the same as when there is a positive tax expense on book income. Similarly, negative tax rates arise from two quite different situations. On the one hand, current tax expense may be negative (i.e., a refund is due) even though book income is positive. This situation arises, generally, when carrybacks of credits earned in the current year result in income tax refunds. On the other hand, current tax expense may be positive even though book income is negative (i.e., there is a book loss). Typically, this situation arises when timing differences result in positive taxable income despite a book loss or when tax accounting rules are more restrictive than book accounting rules. Therefore, to prevent misunderstanding of what the rate means, when there is a book loss for an industry, and either a refund is due (positive rate) or there is positive tax (negative rate), effective tax rates are not shown. Although a particular industry's effective tax rate may not be shown because it is misleading, the results for the industry are included in the aggregate rates for all industries in this study (i.e., the income is included in total income for all industries, and the tax is included in total tax); while the rate for the industry may be misleading, the results for the industry are unlikely to distort the rate for all industries and should be included in computing the overall tax burden.

Finally, the U.S. and foreign rates could be distorted if the method of allocating income between U.S. and foreign sources differs substantially from the income tax methods of allocation. Foreign currency adjustments which are recognized for financial statement purposes under different rules than for tax purposes, and the inclusion of taxes other than creditable foreign taxes, could also distort the foreign rate. Abnormally high tax rates are indicative of such distortion and, therefore, are not shown.

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was not disclosed, the company was excluded from the computation of the aggregate foreign rate and the U.S. rate. In a few cases (e.g., petroleum), this treatment resulted in large companies being excluded from the U.S. and foreign rates. In tables 2, 3, and 5, 1980 and 1981 U.S. rates have been restated from those published in the 1981 Pease-Dorgan Study to include companies where it is reasonable to assume that foreign operations are minimal.

II. COMPARISON OF EFFECTIVE TAX RATES

1983 Effective Tax Rates

The corporations included in this study have an average worldwide effective tax rate of 29.2 percent in 1983, a U.S. effective tax rate of 16.7 percent, and a foreign effective tax rate of 54.3 percent (Table 1).

Worldwide effective tax rates

The worldwide effective tax rates on worldwide income vary widely among industries from 3.3 percent for railroads to 52.9 percent for chemical companies. Two industries have effective tax rates of over 40 percent: chemicals and petroleum. Four industries have effective tax rates of less than 10 percent: paper and wood products, telecommunications, railroads and utilities.

Chemicals

A significant portion (approximately 75 percent) of the worldwide income of the companies included in the chemicals industry group is foreign income. Since the worldwide effective tax rate is a weighted average, the foreign effective tax rate of 71.2 percent for this industry results in a correspondingly high worldwide rate of 52.9 percent even though the U.S. rate is one of the lowest (negative 1.0 percent) of all the industry groups included in this study.

The results for the chemicals group are dominated by the effective tax rates of E. I. DuPont de Nemours and Company (DuPont); without DuPont, which has over 70 percent of the worldwide income for the group, the effective tax rates for chemicals are much different—a worldwide effective tax rate of 37.6 percent and a U.S. effective tax rate of 22.3 percent. DuPont has a high foreign effective tax rate of 81.0 percent (DuPont's current foreign tax expense is $2,044 million on foreign earnings of $2,525 million). An analysis of the company's effective income tax rate in the notes to the financial statements shows that the effective tax rate is increased by 25 percentage points due to higher effective tax rates on foreign operations, in particular by high foreign income taxes on the petroleum operations of DuPont.[3] (The impact on effective tax rates of foreign taxes on petroleum is discussed in the section below on the petroleum industry.)

Another reason for the comparatively high foreign effective tax rate could be that, as explained in the notes to the financial statements, foreign earnings (which, as presented in these statements,

[3] The analysis in the company's financial statement takes account of both current and deferred income tax expense. Since deferred foreign tax expense is $39 million, compared with $2,044 million current foreign tax expense, the rates computed in this study using only current income tax expense are probably affected to the same extent (25 percentage points) by the higher rates on foreign operations.

are used to compute the foreign tax rate in this study) are based on the location of the corporate unit to which such earnings are attributable. Foreign earnings computed under rules similar to the foreign income tax rules for computing foreign source income may be even higher than the amount shown on the financial statements; if foreign earnings were computed under rules similar to the tax rules, the foreign rate would be lower and the U.S. rate correspondingly higher (i.e., the difference between the U.S. and foreign rates may be exaggerated by allocating earnings under the accounting rather than the tax rules.) [4]

Petroleum

As in the chemicals industry group, a significant portion (over 50 percent) of the worldwide income for the petroleum group is attributable to foreign income. The foreign effective tax rate for the group is high (60.0 percent) and, consequently, the worldwide effective tax rate is also high (42.0 percent) relative to other industries.

For financial statement purposes, foreign income tax expense that companies performing extraction activities incur may include amounts that are not income taxes under U.S. concepts, and that taxpayers cannot use as foreign tax credits. Taxpayers and the U.S. Government have frequently disagreed about whether amounts denominated as taxes and paid to foreign governments with respect to the taxpayers' extraction activities constituted non-creditable royalties or creditable taxes.[5] This issue, however, has largely been resolved.

First, Congress, while not directly addressing the question of the true character (income tax or royalty) of these amounts paid to foreign governments, has limited the use of any amounts found to be creditable taxes on oil and gas extraction income so that those credits can offset U.S. tax on only that kind of income, and not on non-extraction income (Code sec. 907). Second, Internal Revenue Service regulations treat certain so-called income tax payments to foreign governments from whom taxpayers receive specific economic benefits (such as the right to extract oil) as comprising two distinct elements: a creditable tax and a deductible payment for the benefits (Treas. Reg. sec. 1.901-2A). In general, the Regulations treat these so-called income taxes as income taxes to the extent that the taxpayer would have been liable for tax under the generally applicable income tax laws of the country.

For example, if a foreign country's generally applicable tax rate is 40 percent, while it applies a 70-percent rate to petroleum income, the Regulation treats the taxpayer who earns $100 of gross petroleum income and who pays $70 to the foreign government as paying a deductible $50 royalty and a creditable $20 tax (at a 40-percent rate on the $50 of post-royalty income).

The discrepancy between amounts denominated as taxes on financial statements and amounts that the United States views as creditable income taxes likely accounts largely for the high appar-

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[4] See Appendix A, "Methodology—Worldwide operations, allocation of income between U.S. and foreign sources".

[5] See Staff of the Joint Committee on Taxation, *Explanation of the Foreign Tax Credit Rules Applicable to Petroleum Income and Description of Administration Proposal*, JCS-26-79, June 18, 1979, pp. 11-14.

ent foreign tax rate for the petroleum industry (and for DuPont with respect to its petroleum operations). The high apparent foreign effective tax rate also results in a worldwide effective tax rate that exceeds the average.

Paper and wood products [6]

Paper and wood products have a worldwide effective tax rate of 7.2 percent and a U.S. effective tax rate of negative 0.5 percent. These relatively low tax rates are due primarily to the effect of International Paper's tax refund. Effective tax rates for paper and wood products are higher if International Paper is excluded from the group; without International Paper, the worldwide effective tax rate is 20.4 percent and the U.S. effective tax rate is 13.9 percent. As explained in notes to its financial statements, International Paper was eligible for an income tax refund of $53.4 million paid in prior years primarily resulting from investment tax credit carryovers.

An analysis of the permanent and timing differences that account for the difference between the statutory rate of 46 percent and the rates computed in this study shows that for the paper and wood products industry the low effective tax rates are caused principally by investment tax credits, accelerated depreciation and capital gains rates. Special tax rules permit owners of timber to treat the income from the sale or disposition of the timber as capital gain rather than ordinary income under certain circumstances. The maximum benefit to be derived from these special rules is a reduction in the effective tax rate of 18 percentage points (from the statutory 46 percent to the separate capital gains rate of 28 percent). While these special rules clearly benefit the paper and wood industry by reducing the effective tax rates in 1983 by an average[7] of 15 percentage points, the effective tax rates are reduced by twice this amount (30 percentage points) by investment tax credits and accelerated depreciation resulting from significant investment in plant and equipment—a tax benefit not limited to this industry.

Telecommunications

The telecommunications industry has more than 8 percent of total worldwide income of the sample of companies used for this study, and a low worldwide effective tax rate (5.6 percent). This group is dominated by AT&T.[8] If just this one company, AT&T, is excluded from the sample, the average worldwide effective tax rate for all remaining companies would increase from 29.2 percent to 31.1 percent, and the U.S. effective tax rate would increase from 16.7 percent to 18.2 percent. There are, of course, other large com-

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[6] Effective tax rates of the paper and wood products industry and the impact of the accounting rules for safe-harbor leasing are discussed further in the section "Tax Return vs. Annual Report Effective Tax Rates, 1981."

[7] An unweighted average.

[8] In 1982, AT&T agreed to divest itself of its local telephone operations. Under the agreement with the United States Department of Justice, the local Bell operating companies are grouped into seven new independent regional holding companies. The new AT&T is no longer limited to the regulated telecommunications business, but will be free to pursue other business opportunities. AT&T's financial statements for 1983 are based on the organization of the company before the restructuring became effective; in 1984, AT&T and the seven holding companies will file separate financial statements.

panies, particularly in the petroleum industry, that account for a large percentage of the total income of the group, but since none of these has such a relatively low rate, it does not reduce the aggregate as much as AT&T. The telecommunications group also has a higher rate if AT&T is excluded from the group; without AT&T, the worldwide effective tax rate is 16.2 percent and the U.S. effective tax rate is 12.6 percent.

The effective tax rate for AT&T as shown in its financial statements (including current and deferred tax) is 34.9 percent. Investment tax credits account for most of the difference (8.2 percentage points) between the statutory rate of 46 percent and the financial statement effective tax rate; the difference between the financial statement effective tax rate and the rate computed in this study (3.0 percent) results principally from timing differences between depreciation expense for income tax purposes and depreciation expense reflected in the financial statements. For other companies in the telecommunications industry group also, investment tax credits and accelerated depreciation are the principal cause of effective tax rates lower than the statutory rate.

Railroads

All five of the railroads included in the railroad industry group have effective tax rates of less than 10 percent. For example, Burlington Northern, which has the largest worldwide income, has an effective tax rate of 2.2 percent. For Burlington Northern, investment tax credits result in a reduction in the effective tax rate of 6.4 percentage points, and excess of tax over book depreciation reduces the effective tax rate by 32.3 percentage points (compared with 48.5 percentage points in 1982 and 53.3 percentage points in 1981). Similarly, for the other railroad companies, investment tax credits and accelerated depreciation are the principal cause of low effective tax rates.

The Economic Recovery Tax Act of 1981 (ERTA) repealed for income tax purposes the retirement-replacement-betterment method of accounting (RRB) for railroad track structures. ERTA provided that costs capitalized under the RRB method and not recovered through retirement as of December 31, 1980, should be depreciated over a period of not less than 5 years and not more than 50 years; accelerated depreciation methods may be used for depreciating these costs. This change in the tax treatment of the depreciation of unrecovered track structure costs contributes to the large timing differences, and corresponding reduction in effective tax rates, in 1981, 1982 and 1983.

Utilities [9]

The worldwide effective tax rate of 7.1 percent in 1983 for the utility industry is significantly lower than the rate of 15.6 percent in 1982. However, the average effective tax rate for 1982 and 1983 is 10.8 percent, which is close to the rate in prior years.[10] This change in rates may be explained in part by a significant change in the effective tax rates for Pacific Gas and Electric, one of the larger companies in the group. Pacific Gas and Electric had a worldwide effective tax rate of 36.9 in 1982, compared with 4.9 percent in 1983, as a result of a sharp drop in current tax expense without a corresponding change in income (current tax expense was $438.1 million in 1982 and $57.7 million in 1983 on approximately the same income (unadjusted) of $1,292.2 million in 1982 and $1,271.8 million in 1983). The total provision for taxes (current and deferred) was approximately the same in both years. The large difference in current tax expense for financial statement purposes may be a result of the operation of regulatory balancing accounts. These special accounting rules may affect year-to-year results; however, the effect over a longer period is generally not significant.

Airlines

The airline companies included in this industry group had an aggregate worldwide and U.S. loss; therefore, no worldwide or U.S. effective tax rate is shown. Foreign income was primarily due to the foreign income of Pan American World Airways. Only three of the nine airlines showed a profit—UAL, Northwest Airlines and American Airlines. The worldwide effective tax rate for these three companies is 4.4 percent, and the U.S. effective tax rate is 3.8 percent.

Classification of companies

Industry groups include companies whose greatest volume of sales lie within that group. Often a company included in one industry group has substantial activities in one or more other groups. Hence the tax rates for an industry reflect the effects of tax rules relating to other, often quite different, industries. For example, Sears is included in the retail industry because more of its sales revenue is from retailing than from insurance or financial serv-

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[9] The installation of major gas and electric production and transmission facilities usually requires large expenditures during construction periods, which may last several years. In order to prevent the cost of the related financing to distort the results of operations, special accounting rules apply for book purposes. Typically, utilities report as income to their shareholders an amount that represents a rate of return on the equity capital invested in construction work in progress. This "income" does not represent revenue received from the utilities customers, but is an accounting entry. In effect, utilities report to their shareholders as income amounts that will probably be added to their rate base, on which they will subsequently be allowed to earn a rate of return. For tax purposes, this "allowance for funds used during construction" (AFUDC) is exempt. Some representatives of the utility industry argue that because AFUDC is not cash income, but is really only a promise of the regulatory commission to allow the utility to earn money in the future, it should be excluded from the denominator of the effective tax rate fraction. However, the utilities do consider this income sufficiently real to report it to their shareholders and, in some cases, to pay dividends from it. In this study AFUDC is counted as income. Excluding AFUDC from income would result in higher effective tax rates for the industry (estimated at approximately 3 percentage points higher).

[10] The Edison Electric Institute prepares a "combined" income statement for over 100 investor-owned electric utilities. Effective tax rates computed from the current tax expense and book income shown on the combined statements are 8.9 percent in 1980, 10.2 percent in 1981, 13.7 percent in 1982, and 10.8 percentage points in 1983—rates that are all within 5 percent of the rates in this study and the income tax return rates in 1980 and 1981.

ices.[11] But because of the special tax provisions that apply to insurance, Sears' effective tax rate is lower than it would be if Sears were a retailer only. In addition, because Sears is so large, the weighted average for the whole retail group is substantially lower than it would be without Sears' insurance operations. It is not possible, generally, to calculate a separate effective tax rate for separate activities within one company; therefore, we cannot calculate Sears' rate for retailing alone to eliminate the effect of insurance tax provisions on the "retail" rate. But the worldwide effective tax rate for retailers computed by excluding Sears is 29.9 percent—8.6 percentage points higher than the rate shown for the retail group including Sears (21.3 percent). It seems reasonable to assume that most of the difference in rates is due to Sears' insurance and other activities.

U.S. effective income tax rates

The U.S. effective tax rates on U.S. income vary between negative 1.0 percent for chemicals and 35.6 percent for soaps and cosmetics. Eleven industries have effective tax rates of less than 10 percent (chemicals, construction, electronics and appliances, financial institutions, insurance, investment companies, motor vehicles, paper and wood, telecommunications, railroads and utilities).

Industries which show a book loss (worldwide and U.S.), for the companies included in the sample, include metal manufacturing, mining, and airlines.

The U.S. effective tax rates are almost all lower than the worldwide rates—some significantly lower. For example, chemicals have a 52.9 percent worldwide effective tax rate but a negative 1.0 percent U.S. rate. Financial institutions have a 24.3 percent worldwide rate but a 6.4 percent U.S. rate. The reasons for the large differences in rates between the worldwide rate and the U.S. rate have not been analyzed in detail for particular industries. However, extensive foreign operations, with the utilization of foreign tax credits, appear to result in a low U.S. effective tax rate relative to the worldwide effective tax rate.[12]

Construction

The construction industry group derived more than 75 percent of its worldwide income from foreign sources. For example, Fluor Corporation, which accounts for more than half of the worldwide income in the group, derived more than 95 percent of its income from foreign sources. As discussed previously, this appears to result in a low U.S. effective tax rate relative to the worldwide effective tax rate.

With the exception of Combustion Engineering, all the companies in the group had negative current tax expense, i.e. refunds due. The positive tax expense for the group is attributable to Combustion Engineering, which had a relatively large current tax expense on a book loss.

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[11] If companies were classified by net income, rather than gross sales, Sears would have been classified as an insurance company in 1982, but as a retailer in 1983.

[12] See discussion of foreign taxes above, under "Worldwide Effective Income Tax Rates"—"Chemicals" and "Petroleum."

Construction companies recognize the profit on long-term contracts on the percentage of completion basis for financial reporting purposes and, at their election, on the completed contract basis for income tax purposes. The use of different methods of accounting for income from long-term contracts is a timing difference that results in deferred taxes. While deferred taxes do not affect the effective tax rates computed in this study (which reflect only current taxes), it is interesting to note a change in the amount of benefit derived from using the completed contract method of accounting. For example, Fluor had deferred taxes attributable to the completed contract method of accounting of $64.8 million in 1981, $16.2 million in 1982 and negative $22.5 million in 1983 (i.e., in 1983 timing differences are reversing and taxable income from long-term contracts is greater than book income). Similarly, Combustion Engineering had deferred taxes attributable to the completed contract method of $24.1 million in 1981, $9.3 million in 1982 and negative $21.5 million in 1983. Thus, it can be seen that the benefit of deferral was less in 1982 than it was in 1981, and in 1983 the timing differences are reversing, i.e., the previously deferred tax is paid. In the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), the tax rules for accounting for long-term contracts under the completed contract method were substantially changed to prevent certain abuses that resulted in distortion of income and inappropriate deferral of taxes. Presumably the reduced benefits in 1982 and 1983 are partially a result of the changes in tax rules enacted in TEFRA. Also, less activity in the construction industry in 1983 results in reduced benefits under the completed contract method.

Electronics and appliances

The U.S. effective tax rate of 7.4 percent for the electronics and appliances industry (worldwide rate is 16.4 percent) is partially attributable to the low U.S. effective tax rate of negative 1.5 percent for General Electric (GE). To a large extent, General Electric's negative effective tax rate results from its leasing operations, not its appliance business.[13] Without General Electric, the U.S. effective tax rate for the electronics and appliances group is 19.8 percent, and the worldwide effective tax rate is 26.9 percent.

Both General Electric and ITT had refunds although they had book income. These refunds, plus the refunds due to two companies with book losses (AT&T Technologies[14] and Texas Instruments), also contributed to the low effective rate for the group.

Financial institutions

The U.S. effective income tax rate of 6.4 percent for financial institutions is somewhat higher than in 1982 (negative 3.8 percent) and the average for the four-year period 1980-1983 of 3.8 percent. The worldwide effective tax rate of 24.3 percent is unchanged from the prior year and is close to the 1980-1983 average (23.9 percent).

In March 1983, the Joint Committee on Taxation prepared an analysis of the effective tax rates paid by 20 large commercial

[13] Also see discussion of General Electric under section on finance subsidiaries.
[14] Previously Western Electric Co.

banks in 1981.[15] The study showed that the most significant permanent difference for banks was the interest received on State and local government obligations which is included as income for financial accounting purposes but is excluded from taxable income. An analysis of 1983 rates shows similar results: tax exempt income reduced the worldwide effective tax rate by amounts which varied from 2.6 percentage points (Citicorp) to 59.0 percentage points (Crocker National). For nine of the twenty banks studied, the reduction was more than 20 percentage points. As in prior years, effective tax rates were also reduced by investment tax credits.

The study of 1981 rates also identified the timing differences that result in a reduction of effective tax rates as computed in this study. Significant timing differences included lease financing, loan-loss reserves, foreign items and methods of accounting. These timing differences continue to be significant, particularly lease financing and loan-loss reserves. Six banks (Continental Illinois, First Interstate, Bankers Trust New York, Security Pacific, Wells Fargo, and Crocker National) reduced their effective tax rates by more than 10 percentage points due to their leasing activities.

The methods used to compute loan loss reserves for tax purposes generally do not result in the same addition to a reserve for loan losses as that computed for accounting purposes. For about a third of the banks, the bad debt deduction allowed for taxes was higher than that allowed for book purposes, giving rise to a deferred tax expense which reduced the current years' income tax liability. The amount of the reduction in effective tax rates was 7.8 percentage points for Chase Manhattan, for example. For other banks, the bad debt deduction allowed for tax purposes was lower than that allowed for book purposes, giving rise to negative deferred taxes which reflect a higher current years' tax liability than book liability. For example, Bank America's effective tax rate was increased by 11.9 percentage points by a larger loan provision for books than for tax.

Finally, the apparently high foreign (and thus worldwide) tax rates for banks may overstate the income taxes that banks actually pay. U.S. banks often pay high foreign withholding taxes imposed on the gross interest payments they receive. These withholding taxes sometimes approach or even exceed the typical net income or "spread" that banks earn on loans. In the case of withholding taxes that banks pay at such apparently high effective rates, it may be inferred either that the tax is not an income tax (and is thus not creditable against U.S. tax liability) or that the borrower, not the bank, bears the tax (and that the tax should not be eligible for the foreign tax credit).[16]

Insurance [17]

The U.S. effective tax rate of the insurance industry group is 9.9 percent (the worldwide effective tax rate is 12.9 percent). This

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[15] *Taxation of Banks and Thrift Institutions,* prepared by the staff of the Joint Committee on Taxation, March 9, 1983, JCS-5-83.

[16] *Id.*

[17] Insurance companies were included in diversified financials in 1981 but are separated into a new group in 1982 and 1983.

group of companies does not necessarily represent the whole insurance industry for two principal reasons. First, many of the largest insurance companies are mutual, rather than, stock companies, and cannot be included in the study because they do not publish comparable data. Second, like other industries in this study, the insurance industry is represented by a small sample of companies: five companies that represent less than 15 percent of total companies in the insurance industry based upon asset size.

Not only is the rate computation difficult because of the differences between stock and mutual companies, but it is complicated further by differences in types of insurance. Life insurance products are different from property and casualty insurance products, and quite different tax rules apply. For tax purposes, life insurance reserve deductions are based on the discounted value of future claims, whereas property and casualty reserve deductions are taken at the undiscounted cost of future payments.[18] In addition, life companies must treat certain amounts credited to policyholders as being funded proportionately out of taxable and tax-exempt income, whereas property and casualty companies get the full benefit of tax-exempt income. As a result, property and casualty companies tend to generate tax losses which are used to offset the life insurance companies' taxable income in consolidated returns of parent companies which own both types of companies. Furthermore, because many of the largest life insurance companies are mutuals and are therefore excluded from this study, the effective tax rates are more heavily weighted by the property and casualty component of the insurance industry.

Motor vehicles

The U.S. effective tax rate for the motor vehicles group is 3.5 percent. The reasons for this relatively low effective tax rate include investment tax credits and timing differences attributable to benefit plans expense, installment sales and depreciation. Also contributing to the relatively low effective tax rate for the motor vehicles group is Ford's negative current tax expense (refund) of $96.9 million.

Other industries with low U.S. effective tax rates

Other industries with U.S. effective tax rates of less than 10 percent (chemicals, paper and wood products, telecommunications, railroads and utilities) are discussed above under the section on worldwide effective tax rates.

Finance subsidiaries

Typically, corporations file a consolidated income tax return with any wholly owned finance subsidiary, even when, under the accounting rules, the finance subsidiary is not included in consolidated financial statements. If a finance subsidiary generates significant tax benefits (e.g., from leasing), the tax expense as reflected in the parent's financial statements may be misleading; the tax expense on the consolidated tax return would be much lower. In this

[18] The taxation of life insurance companies was revised substantially in the Deficit Reduction Act of 1984 (P.L. 98-369, July 18, 1984).

study, equity in the net earnings of wholly owned subsidiaries generally is eliminated from the parents' income, i.e., neither the income nor tax expense of the subsidiary is included in the tax rate computation. However, because this treatment may be misleading in cases where a tax rate for the finance subsidiary is significantly different from the rate for the parent, a combined rate is computed for the parent and subsidiary in these cases. The pre-tax income of the subsidiary is added to the income of the parent, and the current tax expense of the subsidiary is added to the tax expense of the parent. The financial statements of the subsidiary are needed, however, to compute this combined rate. A combined rate was computed only when, from other information, it was clear that the subsidiary generated significant tax benefits and the financial statements were available. Thus, a combined rate may not have been computed in all cases where it was appropriate.

A combined rate was computed for General Electric because of the significant tax benefits generated by General Electric's wholly owned subsidiary, General Electric Credit Corporation. As a result, General Electric's worldwide and U.S. effective tax rate in 1983 was reduced by over 25 percentage points by including General Electric Credit Corporation.

U.S. and Worldwide Effective Tax Rates, 1980–1983

Tables 2 and 3 show U.S. and worldwide effective tax rates, respectively, for the period 1980 through 1983. There is no consistent pattern of change in the effective tax rates over the period 1980 through 1983 for all industries. Some industry rates remain fairly constant, such as the financial institutions' worldwide effective tax rate (22.5 percent, 24.5 percent, 24.3 percent, and 24.3 percent for 1980, 1981, 1982, and 1983 respectively). The rates for other industries change substantially from year to year. For example, the U.S. effective tax rate for chemicals was 13.7 percent in 1980, 5.0 percent in 1981, negative 17.7 percent in 1982, and negative 1.0 percent in 1983.

Average rates for the 4-year period 1980–1983, are computed by dividing the total tax for the 4-year period by the total income for the 4-year period. By aggregating the income and taxes for the 4-year period, the effect of factors which tend to distort the rates in any one year are reduced (e.g., an unusual loss in a large company may distort the aggregate rate in one year, while it may not have a significant effect on the 4-year rate). Four-year rates are not available for all of the industries studied in 1983 because some new industries were added to the study in 1982 and other companies were grouped differently from the prior years. The meaning of such aggregate data, moreover, is obscured by the fact that the tax law was changed, in significant respects, during the 4-year period. Also, different companies were included in the industry group in different years, which could cause the data to present a misleading indication of the true trend.[19]

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[19] 1983 rates were computed for the same companies included in the study of 1982 rates; using the same companies, the 1983 worldwide rate is 29.7 percent, the U.S. rate is 16.7 percent and the foreign rate is 54.8 percent. These rates differ by less than 1 percentage point from the rates presented in this study, which are computed from companies selected in the same manner (generally the largest companies in the industry) as in the prior years.

Of the industries for which data are available, railroads have the lowest worldwide effective tax rate of 2.4 percent for the period 1980-83, and petroleum has the highest worldwide rate of 40.9 percent. Paper and wood products have the lowest, and only negative, U.S. effective tax rate (2.9 percent) for the 4-year period, while the highest U.S. effective tax rate is 38.2 percent for trucking. Five out of the 17 industries for which prior years' data are available had U.S. effective tax rates of less than 10 percent (aerospace, chemicals, financial institutions, paper and wood products, and railroads).

Average Effective Tax Rates, 1980-1983

Table 4 shows the average effective tax rates for all companies for 1980, 1981, 1982, and 1983. The U.S. effective tax rate on U.S. income declined from 21.8 percent in 1980 to 17.2 percent in 1981 and 16.1 percent in 1982. It remained at approximately the same level (16.7 percent) in 1983. The worldwide effective tax rate declined from 34.3 percent in 1980 to 29.6 percent in 1981, but remained at the same level (29.6 percent) in 1982; again in 1983, the worldwide effective tax rate remained at approximately the same level (29.2 percent). These data should be interpreted cautiously as indicators of a true trend, since different companies were included in the data for different years.

Tax Return vs. Annual Report Effective Tax Rates, 1981

The effective tax rates in this study are computed for only a small number of the largest companies in selected industries. Do these rates fairly represent the Federal income tax burden of each industry given the problems in computing effective tax rates from financial statements? In order to shed some light on this question, an effort was made to compare the rates computed in this study with tax return data.

Solely for purposes of determining whether the effective tax rates in this study approximate the actual rate paid by an industry, an effective tax rate was computed for a few industries[20] from the *Corporation Statistics of Income* data for 1981 (the most recent year available).[21] The rate was computed by comparing U.S. tax liability plus foreign taxes paid (a measure of worldwide tax expense) with net income per books plus the provision for Federal income taxes (worldwide income). These rates differ from effective tax rates computed from annual reports in several important respects. Probably the biggest difference is that the tax return measure of "taxes paid" does not reflect any refunds. Another important difference is that net income per books is often not reported on the return, and even if reported is often incorrect.[22] Also, the consolidation rules for tax purposes are different from the accounting rules, so the taxable entity may not be the same as the financial statement entity. The final difference is that rates from income

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[20] For purposes of the *Corporation Statistics of Income*, companies are classified by total receipts; in this study, companies are classified by sales. It is unlikely that this difference in classification methods would affect this comparison significantly.

[21] A similar comparison for 1980 was presented in the 1982 Pease-Dorgan Study.

[22] Firms that reported zero after-tax book income are excluded.

tax returns are computed only for firms with positive after-tax income and positive tax liability.

Table 5 shows a comparison of the effective tax rates based on annual reports with the effective tax rates based on tax return data. Some of the rates computed by the two different methods are remarkably similar. For example, rates which differ by less than 2 percentage points include electric, gas, and sanitary services, which have a rate of 9.2 percent on tax returns compared with 10.3 percent for gas and electric utilities on financial statements.[23] Food and kindred products have a rate of 31.0 percent on tax returns, compared with 32.6 percent on financial statements.

Several other rates differ by 5 percentage points or less. For example, chemicals, have a rate of 31.7 percent on tax returns, compared with a 29.2 percent worldwide effective tax rate computed from 1981 financial statements; the electric and electronic equipment industry rate is 26.8 percent on tax returns, compared with electronics and appliances' rate of 24.0 percent on financial statements; and general merchandise stores have a rate of 21.4 percent on tax returns, compared with 24.5 percent for retailers on financial statements.

Some rates differ by larger margins. The rate for banking on tax returns is 15.2 percent compared with 24.5 percent rate for financial institutions (this group includes only commercial banks) on financial statements; petroleum and coal products have a rate of 46.3 percent on tax returns compared with 38.0 percent based on financial statements; the rate for tobacco manufacturers is 18.1 percent on tax returns rather than 29.5 percent on financial statements for the tobacco group in this study. These results are similar to those presented for 1980 in the 1982 Pease-Dorgan Study (except for the petroleum industry, where the difference in rates is greater in 1981 (8.3 percentage points) than in 1980 (0.8 percentage points)).

Any comparison of rates computed for different samples using different methods must be used with caution. Flaws become more apparent when the rates for an industry are quite different under the two methods. For example, paper and allied products have a rate of 27.6 percent computed from the tax return data, but a negative 8.7 percent rate computed from financial statements (for 1980, the tax return rate was 29.6 percent compared with 7.0 percent on financial statements). While these differences may be due to refunds reflected in the annual report rate but not in the tax return rate, the differences need explaining—and this is not possible without much more analysis. However, to determine whether the differences could be explained by an unrepresentative sample in the 1981 Pease-Dorgan Study, tax return rates are computed for the same companies that were included in the 1981 study in the paper and wood products group and in the financial institutions group.

For paper and wood products, the tax return rate based on the same five companies included in the 1981 study is 29.1 percent, which is slightly higher than the rate for the whole industry (27.6 percent) but is quite different from the rates based on financial statements (negative 8.7 percent). Since the sample thus appears to

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[23] 1981 rates computed from annual reports are as shown in Table 3.

be representative of the industry for purposes of computing the rates based on tax returns, the reason for the significant difference in rates probably lies in the accounting treatment of safe-harbor leasing. Data from information returns indicate that in the period before February 20, 1982, the forest products industry used safe-harbor leasing extensively; the forest products industry had property subject to safe-harbor leases with a basis of $1,801 million—more than any other industry studied.[24] Tax return data for the five companies show an aggregate tax liability in 1981, while the financial statements show an aggregate refund due. International Paper, the largest company in the group, explains in notes to its financial statements that under the leasing provisions of ERTA, it sold tax credits and depreciation related to $548 million of property, plant and equipment. A portion of the pre-tax proceeds in an amount equal, after allowing for income taxes, to the tax credits sold was allocated to the current income tax provision; the balance of the pre-tax proceeds was recorded as a reduction to the plant, property and equipment account. Thus, current tax expense was negative ($43.1 million), although there was probably an actual tax liability.

Which of these tax rates, the rate based on tax returns or the rate based on financial statements, more clearly reflects the tax burden of the industry in this case? It can be argued that the proceeds from the sale of tax benefits reflect indirectly a reduction in the tax burden that could not be achieved directly, in which case the rate based on financial statements that reflects this indirect benefit more clearly represents the tax burden of the industry.

The tax return rate for the twenty commercial banks included in the 1981 Pease-Dorgan Study is 20.7 percent, compared to a tax return rate of 15.2 percent for the banking industry as a whole. Thus, it appears that the smaller banks and thrift institutions may have a lower worldwide effective rate than the large commercial banks. This could be explained in part by the substantial foreign tax expense of the large commercial banks. The difference between the tax return rate for the 20 large banks (20.7 percent) and the rate based on financial statements (24.5 percent) is comparable to the differences between these two measures of effective tax rates in other industries.

Even though this comparison of rates computed from tax return data with rates computed from annual reports is inexact, one industry's tax rate relative to other industries' rates is generally the same under both methods. For example, utilities and banks pay lower rates of tax than the retailers or instrument companies. Thus, the rate computed from tax return data does provide support for the relative industry rates computed from annual reports in this study.

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[24] *Analysis of Safe-Harbor Leasing*, prepared by the Staff of the Joint Committee on Taxation, June 14, 1982, JCS-23-82.

Trends in U.S. Corporate Taxes as Percentage of Government Receipts

Effective tax rates in this study are computed for only a small number of large companies, and aggregate rates are only available for the period 1980 through 1983. U.S. tax rates for these companies declined over this period. Does this decline in rates represent fairly an overall decline in the corporate Federal income tax burden? In an effort to answer this question, at least partially, the trend in rates based on this study is compared with the trend in corporate taxes as a percentage of Federal Government receipts.

Table 6 shows Federal Government receipts for the period 1950 through 1983 by category—individual, corporate, social security, excise and other—as a percentage of total receipts. Receipts are measured on a unified budget basis. In the unified budget, corporate taxes are accounted for on a cash basis, by fiscal year, whereas in financial statements, taxes are accounted for on an accrual basis, by the corporation's fiscal year. Corporate taxes have declined steadily over the period from 26.5 percent of total receipts in 1950 to only 6.2 percent in 1983. Meanwhile, individual taxes have increased from 39.9 percent in 1950 to 48.1 percent in 1983, and contributions for social insurance have increased more rapidly from 11.1 percent in 1950 to to 34.8 percent in 1983. If contributions for social insurance are excluded, receipts from individual taxes are 73.8 percent, corporate taxes 9.5 percent, and indirect taxes 16.7 percent of the total in 1983.

It appears that the decline in the effective rate of the Federal corporate income tax has contributed to the reduced contribution of this tax to total Federal receipts.

Table 1.—Comparison of Corporate Effective Tax Rates by Industry, 1983

	Thousands of dollars						Tax rate (percent)		
	U.S. income before tax	Foreign income before tax	Worldwide income before tax	Current U.S. tax expense	Current foreign tax expense	Current worldwide tax expense	U.S. tax rate on U.S. income	Foreign tax rate on foreign income	Worldwide tax rate on worldwide income
Aerospace	3,287,418	373,107	3,660,525	459,337	201,611	660,948	14.0	54.0	18.1
Beverages	1,688,161	577,327	2,265,488	316,120	301,673	617,793	18.7	52.3	27.3
Broadcasting	1,081,109	209,552	1,290,661	199,818	79,957	279,775	18.5	38.2	21.7
Chemicals	1,164,100	3,416,300	4,580,400	(11,100)	2,433,900	2,422,800	(1.0)	71.2	52.9
Computers and office equipment	6,842,475	4,972,408	11,814,883	1,796,917	2,702,044	4,498,961	26.3	54.3	38.1
Construction	59,386	195,035	254,421	429	74,134	74,563	.7	38.0	29.3
Electronics and appliances	3,952,658	1,482,062	5,434,720	290,863	598,646	889,509	7.4	40.4	16.4
Financial institutions	2,862,830	3,460,057	6,322,887	182,040	1,354,023	1,536,063	6.4	39.1	24.3
Food processors	3,810,004	1,309,634	5,119,638	987,286	511,118	1,498,404	25.9	39.0	29.3
Glass and concrete	605,401	180,435	785,836	105,754	85,725	191,479	17.5	47.5	24.4
Instruments	2,256,478	659,639	2,916,117	739,600	330,291	1,069,891	32.8	50.1	36.7
Insurance	1,755,975	48,800	1,804,775	174,398	58,491	232,889	9.9	(1)	12.9
Investment companies	979,855	680,650	1,660,505	91,478	137,383	228,861	9.3	20.2	13.8
Metal manufacturing	(1,341,203)	16,600	(1,324,603)	25,396	40,300	65,696	(1)	(1)	(1)
Metal products	286,113	318,686	604,799	43,296	133,960	177,256	15.1	42.0	29.3
Mining	(485,812)	145,328	(340,484)	(18,861)	70,961	52,100	(1)	48.8	(1)
Motor vehicles	5,759,186	1,281,402	7,040,588	202,308	527,330	729,638	3.5	41.2	10.4
Paper and wood products	759,318	118,263	877,581	(3,846)	66,917	63,071	(.5)	56.6	7.2
Petroleum	19,255,863	22,171,133	41,426,996	4,094,087	13,303,397	17,397,484	21.3	60.0	42.0
Pharmaceuticals	2,301,842	1,549,400	3,851,242	626,033	608,331	1,234,364	27.2	39.3	32.1
Retailing	5,067,076	288,367	5,355,443	1,015,447	125,630	1,141,077	20.0	43.6	21.3
Rubber	618,089	283,821	901,910	121,366	194,260	315,626	19.6	68.4	35.0
Soaps and cosmetics	2,027,044	513,380	2,540,424	720,699	266,857	987,556	35.6	52.0	38.9
Telecommunications	11,072,260	127,117	11,199,377	530,913	96,978	627,891	4.8	(1)	5.6

Tobacco	3,083,254	539,760	3,623,014	1,041,548	150,751	1,192,299	33.8	27.9	32.9
Transportation:									
Airlines	(272,024)	169,123	(102,901)	(58,828)	4,464	(54,364)	[1]	2.6	[1]
Railroads	2,164,765	.....	2,164,765	71,899	.....	71,899	3.3	.....	3.3
Trucking	1,283,557	7,824	1,291,381	442,768	4,278	447,046	34.5	54.7	34.6
Utilities (electric and gas)	7,158,433	.....	7,158,433	505,298	.....	505,298	7.1	.....	7.1
Wholesalers	947,776	9,200	956,976	329,472	13,806	343,278	34.3	[1]	35.9
Average, All Companies	90,031,387	45,104,410	135,135,797	15,021,935	24,477,216	39,499,151	16.7	54.3	29.2

[1] Rate not computed. See Part I: "Methodology—Computation of tax rates."

Table 2.—Comparison of U.S. Effective Tax Rates by Industry, 1980–83

[In percent]

Industry [1]	1980	1981	1982	1983	1980–83 average
Aerospace	16.4	6.8	(0.6)	14.0	9.7
Beverages	28.0	28.8	20.5	18.7	23.2
Broadcasting	(3)	(3)	8.9	18.5	(3)
Chemicals	13.7	5.0	(17.7)	(1.0)	3.6
Computers and office equipment	24.9	25.3	26.4	26.3	25.8
Construction	(3)	(3)	15.9	.7	(3)
Electronics and appliances	24.5	17.1	14.3	7.4	16.2
Financial institutions	5.8	2.7	(3.8)	6.4	3.8
Food processors	35.6	26.8	31.6	25.9	29.5
Glass and concrete	(3)	(3)	(2)	17.5	(3)
Instrument companies	37.1	26.6	21.9	32.8	29.5
Insurance	(3)	(3)	(6.3)	9.9	(3)
Investment companies	(3)	(3)	21.3	9.3	(3)
Metal manufacturing	15.3	10.2	(2)	(2)	(2)
Metal products	(3)	(3)	30.2	15.1	(3)
Mining	(3)	(3)	(2)	(2)	(3)
Motor vehicles	(3)	(3)	(2)	3.5	(3)
Paper and wood products	(1.4)	(14.2)	36.1	(.5)	(2.9)
Petroleum [4]	31.1	21.7	18.2	21.3	23.5
Pharmaceuticals	39.2	35.9	32.7	27.2	32.9
Retailing	34.1	22.3	20.4	20.0	22.9
Rubber	(3)	(3)	39.0	19.6	(3)
Soaps and cosmetics	(3)	(3)	33.3	35.6	(3)
Telecommunications	(3)	(3)	1.6	4.8	(3)
Tobacco	31.4	31.3	36.3	33.8	33.3
Transportation:					
Airlines	3.0	(2)	(2)	(2)	(2)
Railroads	10.7	(7.5)	4.1	3.3	2.4
Trucking	37.5	46.1	36.9	34.5	38.2
Utilities [5]	10.9	10.3	15.6	7.1	10.7
Wholesalers	(3)	(3)	36.1	34.8	(3)

[1] An industry is included in this table only if substantially the same companies are included in the sample each year.

[2] Rate not computed on book loss. See Part I: "Methodology—Computation of tax rates."

[3] The 1980 and 1981 rates are not available; the 1980–1983 average is not computed.

[4] Some companies included in the 1982 and 1983 group were classified with crude oil production in 1980 and 1981.

[5] In 1980 and 1981, the utilities group included AT&T and GTE. The 1980 and 1981 utilities rate is restated to include only electric and gas utilities.

Table 3.—Comparison of Worldwide Effective Tax Rates by Industry, 1980–83

[In percent]

Industry [1]	1980	1981	1982	1983	1980–83 average
Aerospace	20.3	12.0	7.1	18.1	14.7
Beverages	32.7	33.2	28.8	27.3	30.3
Broadcasting	(3)	(3)	13.7	21.7	(3)
Chemicals	30.3	29.2	47.3	52.9	39.3
Computers and office equipment	36.9	39.1	37.1	38.1	37.8
Construction	(3)	(3)	22.6	29.3	(3)
Electronics and appliances	27.5	24.0	21.4	16.4	22.6
Financial institutions	22.5	24.5	24.3	24.3	23.9
food processors	37.6	32.6	36.5	29.3	33.5
Glass and concrete	(3)	(3)	17.9	24.4	(3)
Instrument companies	40.7	29.4	26.9	36.7	33.4
Insurance	(3)	(3)	(2.5)	12.9	(3)
Investment companies	(3)	(3)	23.3	13.8	(3)
Metal manufacturing	18.5	11.5	(2)	(2)	(2)
Metal products	(3)	(3)	42.8	29.3	(3)
Mining	(3)	(3)	(2)	(2)	(3)
Motor vehicles	(3)	(3)	(2)	10.4	(3)
Paper and wood products	7.0	(8.7)	42.5	7.2	4.1
Petroleum [4]	44.7	38.0	38.2	42.0	40.9
Pharmaceuticals	41.5	41.3	38.3	32.1	37.8
Retailing	35.1	24.5	21.6	21.3	24.4
Rubber	(3)	(3)	59.6	35.0	(3)
Soaps and cosmetics	(3)	(3)	38.0	38.9	(3)
Telecommuncations	(3)	(3)	2.3	5.6	(3)
Tobacco	29.9	29.5	32.7	32.9	31.4
Transportation:					
Airlines	14.5	(2)	(2)	(2)	(2)
Railroads	10.7	(7.5)	4.1	3.3	2.4
Trucking	38.4	46.9	37.2	34.6	38.6
Utilities [5]	10.9	10.3	15.6	7.1	10.7
Wholesalers	(3)	(3)	34.1	35.9	(3)

[1] An industry is included in this table only if substantially the same companies are icluded in the sample each year.

[2] Rate not computed on book loss. See Part I: "Methodology—Computation of tax rates."

[3] The 1980 and 1981 rates are not available; the 1980–1983 average is not computed.

[4] Some companies included in the 1982 and 1983 group were classified with crude oil production in 1980 and 1981.

[5] In 1980 and 1981, the utilities group included AT&T and GTE. The 1980 and 1981 utilities rate is restated to include only electric and gas utilities.

Table 4.—Comparison of Average Effective Corporate Tax Rates, 1980–83

[In percent]

	1980 [1]	1981 [1]	1982	1983
U.S. rate on U.S. income	21.8	17.2	16.1	16.7
Foreign rate on foreign income	52.0	55.3	55.0	54.3
Worldwide rate on worldwide income	34.3	29.6	29.6	29.2

[1] Average rates for 1980 and 1981 are computed from total income and expense for the companies included in the 1981 study. To the extent that prior yer rates have been restated and to the extent that different aggregation methods were used in 1981, these rates may not be exactly comparable with the 1983 rates. It is unlikely, however, that the change in methodology results in any significant change in the aggregate rates.

Table 5.—Comparison of Worldwide Effective Tax Rates, 1981: Tax Returns vs. Financial Statements

[In percent]

Industry [1]	Effective worldwide tax rate	
	Tax return basis	Financial basis statements
Chemical	31.7	29.2
Electronics and appliances	26.8	24.0
Financial institutions	15.2	24.5
Food processors	31.0	32.6
Instrument companies	37.5	29.4
Paper and wood products	27.6	(8.7)
Petroleum	46.3	38.0
Retailers	21.4	24.5
Tobacco	18.1	29.5
Utilities (electric and gas)	9.2	10.3

[1] Industry groups are described in *Corporation Statistics of Income* data as follows: chemicals and allied products, electric and electronic equipment, banking, food and kindred products, instruments and related products, paper and allied products, petroleum (including integrated) and coal products, general merchandise stores, tobacco manufacturers, and electric, gas, and sanitary services.

Table 6.—Federal Government Receipts, 1950–83,

[By major category, as percent of total receipts [1]]

Fiscal year	Individual income taxes	Corporation income taxes	Social insurance taxes and contributions	Excise taxes	All other receipts
1950	39.9	26.5	11.1	19.1	3.4
1952	42.2	32.1	9.8	13.4	2.6
1954	42.4	30.3	10.3	14.3	2.8
1956	43.2	28.0	12.5	13.3	3.0
1958	43.6	25.2	14.1	13.4	3.7
1960	44.0	23.2	15.9	12.6	4.2
1962	45.7	20.6	17.1	12.6	4.0
1964	43.2	20.9	19.5	12.2	4.2
1966	42.4	23.0	19.5	10.0	5.1
1968	44.9	18.7	22.2	9.2	5.0
1970	46.9	17.0	23.0	8.1	4.9
1972	45.7	15.5	25.4	7.5	6.0
1974	45.2	14.7	28.5	6.4	5.2
1976	44.2	13.9	30.5	5.7	5.8
1978	45.3	15.0	30.3	4.6	4.8
1980	47.2	12.5	30.5	4.7	5.1
1981	47.7	10.2	30.5	6.8	4.8
1982	48.2	8.0	32.6	5.9	5.3
1983	48.1	6.2	34.8	5.9	5.0

[1] Components may not total 100.0 percent due to rounding.

Source: Office of Management and Budget, *Federal Government Finances: 1985 Budget Data,* February, 1984.

III. APPENDICES

APPENDIX A: TECHNICAL DISCUSSION OF METHODOLOGY

Included in this section is a discussion of the background of accounting for income taxes and effective tax rates. This is followed by a discussion of several technical points, some of which are the basis for adjustments to published data for purposes of computing effective tax rates.

Background

One definition of a corporation's "effective tax rate" is simply the income tax it owes in a particular year divided by its income for that year. The Securities and Exchange Commission requires that publicly owned corporations include in their annual reports a reconciliation between their actual effective tax rate and the maximum statutory corporate tax rate (now 46 percent).[1] Because data from corporate income tax returns are only available several years after the taxable year for which the returns are filed and returns of individual companies are confidential, the annual reports present the most up-to-date and accessible evidence on corporate effective tax rates. However, a number of problems arise in using these data for this purpose. These are discussed below.

The differences between the tax and financial accounting rules, and tax credits, account for the difference between effective tax rates and the statutory rate.[2] Some of these differences are referred to as timing differences, which will reverse in a future period, and others are permanent differences, which will not reverse.

Permanent differences arise from statutory provisions under which specified revenues are exempt from taxation, deductions are allowed for tax purposes for items not counted as expenses for book accounting purposes, and specified expenses (for book purposes) are not allowable as deductions in determining taxable income. An example of a permanent difference is the interest received on municipal bonds, which is included in income for book purposes but excluded for tax purposes. Other permanent differences arise from items entering into the determination of taxable income which are not components of pretax accounting income in any period. Examples include the deduction for intercorporate dividends received

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[1] APB Opinion No. 11 recommends that significant differences between pretax accounting income and taxable income be disclosed. The Securities and Exchange Commission formalized this rule to require a reconciliation of the effective tax rate to the statutory rate (Rule 17, CFR 210.4-08(h)). In addition, any timing difference that is 5 percent or more of total timing differences is generally disclosed separately.

[2] Generally, the rules for accounting for income taxes are described in APB Opinion No. 11, as amended.

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and the excess of percentage depletion over cost depletion. Another type of permanent difference is a tax credit.

Timing differences arise from differences between the periods in which transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income. Each timing difference originates in one period and reverses in one or more subsequent periods. For example, depreciation may be reported on an accelerated basis for tax purposes but on a straight-line basis for accounting purposes. Gross profits on installment sales are recognized for accounting purposes in the period of sale, but are reported for tax purposes in the period the installments are collected.

The accounting recognition of the tax effects of timing differences is based on the concept of interperiod tax allocation.[3] Under this concept, the provision for income taxes on the financial statement for a given year includes all the tax effects of the revenue and expense transactions included in the determination of pretax accounting income for that year. Thus, the total tax expense for the year is the statutory rate times income before tax, plus or minus whatever adjustments are needed to allow for certain permanent differences. Some portion of this expense is due currently under the tax law while the rest will be due in the future. The portion that is due currently is termed "current tax expense," and the portion that will be due in the future is termed "deferred tax expense." [4]

In financial statements, an effective tax rate is computed by comparing the provision for income taxes (current and deferred) with net income before tax. This effective tax rate is reconciled to the statutory rate by identifying the permanent differences which give rise to the differences in rates.

Methodology

Effective tax rates can be computed from data published in annual reports using various methodologies regarding the appropriate measurement of "taxes paid" and "income." It is important to note that there has been a good deal of controversy about just what methodology is appropriate for this purpose and that the resulting effective tax rate measures can vary markedly.

In this study, the effective tax rates are computed by comparing current tax expense with book income. While these amounts are readily available from the annual reports, some adjustments are

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[3] The concept of comprehensive interperiod tax allocation (APB Opinion No. 11, *Accounting for Income Taxes*) is currently being reevaluated by the accounting profession. See Discussion Memorandum, *An Analysis of Issues Related to Accounting for Income Taxes*, Financial Accounting Standards Board, August 29, 1983.

[4] Deferred tax expense can be negative, which will be the case whenever book accounting principles require that expenses be deducted prior to the time they are deductible for tax purposes or income reported later than the time it is included for tax purposes. Deferred tax expense can also be negative when there are more timing differences reversing than new timing differences arising. For example, new timing differences from the use of the completed contract method of accounting will decrease when activity in the construction business decreases; meanwhile, timing differences attributable to activity in prior years may be reversing. Generally when there is a sharp reduction in activity, the timing differences that are reversing exceed the new timing differences, which results in a negative deferred tax. Current tax expense can also be negative, which will be the case when carrybacks result in income tax refunds.

appropriate. This section discusses several technical problems, some of which are the basis for these adjustments.

Consolidation of subsidiaries

For financial statement purposes, companies generally consolidate subsidiaries that are more than 50 percent owned, including foreign subsidiaries. For Federal income tax purposes, however, generally only domestic subsidiaries that are 80 percent or more owned are eligible to be included in a consolidated income tax return. Thus, the taxable entity and the financial statement entity upon which this study is based may not be the same.

In financial statements, the entire Federal income tax expense of all consolidated subsidiaries is reported as though it were an income tax or refund wholly attributable to the majority interest of the consolidated group. However, the minority interest in the subsidiaries' income or loss (perhaps as much as 49 percent) is eliminated net of tax. Thus, the consolidated financial statements often show the total tax expense of subsidiaries that may be only 51 percent owned, while eliminating the after-tax income attributable to the minority interest.

To compensate for this, the net income per financial statements is adjusted to reverse the elimination of the income or loss attributable to the minority interest.

Equity accounting for investments in affiliates and joint ventures

Generally, investments in affiliates (20 to 50 percent owned companies) and joint ventures are accounted for by the equity method. This method produces the same net income as does the consolidation method, but through a different technique. Under the equity method, the parent corporation's proportionate share of the after-tax earnings of the affiliate or joint venture is shown as a single item in the income statement. In a consolidation, on the other hand, all income and expense accounts of the subsidiary are combined with those of the parent, and the minority interest is eliminated as a single item.

Under the equity method the parent corporation's provision for income taxes generally does not include the tax attributable to the parent's equity in the net income or loss of the affiliate or joint venture. If the equity earnings are reported in this manner, the equity income or loss is eliminated from net income of the parent.

Sometimes the pre-tax equity income is included in income of the parent and the related taxes are included in the parent's tax provision. Usually this occurs where the parent owns more than an 80 percent interest in the equity company, but is not consolidating it for some other reason. If equity earnings are reported in this manner, no adjustment is needed.

Overstating the provision for Federal income taxes

Corporations may overstate the accrued Federal income tax liability, and thus overstate the provision for taxes to provide a "cushion" for potential increases in tax liability resulting from Internal Revenue Service examinations. Typically, any cushion is reflected in the deferred rather than the current provision. A tax rate computed from the current provision only would not normally

be distorted, therefore, by the cushion. Because the amount of cushion in current tax expense is not public information, it is not possible to adjust for any overstatement. However, the effect of any cushion on the effective tax rates computed in this study is probably minimal.

Intraperiod tax allocation

Extraordinary items or discontinued operations

The accounting rules require that the effect of taxes on the various sections of the income statement be shown separately in each section. For example, the tax expense or savings attributable to extraordinary items or discontinued operations is shown separately from that which is attributable to normal operations. Occasionally, the extraordinary item is recognized for financial statement purposes in a period different than for tax purposes, which causes interperiod and intraperiod tax allocation rules to operate together.

For purposes of this study, the profit or loss from extraordinary items and discontinued operations which is reported separately is excluded from income, and the related tax is excluded from tax expense. On the other hand, the current portion of other intraperiod taxes is aggregated with the current tax expense which relates to normal operations.

Banks

Under accounting rules for years prior to 1983, banks were required to report investment securities gains or losses as a separate item on the income statement together with the related income tax effect. Accordingly, to compute effective tax rates under the methodology used in this study, an adjustment was required in years prior to 1983: investment securities gains and losses were added to income and the related current tax expense was added to the current tax expense related to normal operations.

The Securities Exchange Commission has revised the reporting requirements of banks (Article 9 of Regulation S-X): under the new rules, (effective for 1983 financial statements) bank holding companies are required to report investment securities gains or losses, regardless of materiality, as a component of "other income" (rather than as a separate item on the income statement), even if such amounts are a loss. This revision eliminates the two-step presentation of security gains or losses. Thus, no adjustments to reported income or taxes are required in order to compute the 1983 effective tax rates.

Investment tax credit

Investment tax credits pertaining to lease financing are frequently recognized over the recovery period of the lease investment, and are amortized to lease income. For purposes of computing the tax rates, income should be reduced by the amortized investment tax credit, and current tax expense should also be reduced. But it is not possible to make this adjustment in every case because the amount of investment tax credit amortized to lease income is not always disclosed. Since the adjustment cannot be made consistently in every case where it is appropriate, no adjustment is made to

income or tax expense for these amounts. Generally, this would result in a slightly higher tax rate than if the adjustment were made.

Safe-harbor leasing

The safe-harbor leasing provisions of ERTA permitted owners of property who could not use the tax benefits of ownership (e.g., depreciation and investment tax credit) to transfer some of those benefits to persons who can use them without having to meet the prior law requirements for characterizing the transaction as a lease.[5] The accounting treatment of safe-harbor leases requires that the buyer/lessor treat the purchase of benefits as an investment, and that the seller/lessee report as income the proceeds from the sale of tax benefits.[6] Some companies reflect the income from the sale of tax benefits as a reduction in current tax expense; other companies include such amounts as an income item.

To the extent that income from the sale of tax benefits is shown as a reduction of current tax expense, the income tax liability as shown on the income tax return will be greater than the current tax expense shown on the financial statements. Thus, it is possible that the financial statements may reflect a refund due even though the income tax return shows a tax liability. In subsequent years there may be investment tax credits that may be carried back to offset this tax liability. The financial statements will reflect this refund even though from financial information alone it may not be apparent that there is a tax liability to offset in the prior year (which shows a refund due to the sale of tax benefits).

For purposes of computing comparable effective tax rates, income and current tax expense should be adjusted so that the treatment of income from the sale of tax benefits is consistent among companies. However, because data are not available to make such adjustments in every case, no adjustments are made in this study to income or tax expense for these amounts. Where the income from the sale of tax benefits is shown as a reduction of current tax expense, the effective tax rates in this study are lower than where the tax benefits are shown as income.

The effect on the relative effective tax rates is probably not significant because, although one company may treat the income from the sale of tax benefits differently than another company, there is no systematic pattern of one industry treating such amounts differently than another industry.

Current income tax expense

Adjustments to prior years' estimates

The current tax provision normally represents the tax estimated to be shown on the return to be filed. But the current provision for each year may be adjusted by the over -or under-estimation of the prior year's current provision. To the extent of the current and prior year errors in estimation, the current income tax provision

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[5] TEFRA repealed the safe-harbor lease provisions for leases (other than for leases covered by a transitional rule) entered into after December 31, 1983.

[6] Financial Accounting Standards Board Exposure Draft (revised as of April 13, 1982).

does not represent the actual current tax expense as it would be calculated on a strict accrual basis. The effect of these rates in estimation on the effective tax rates computed in this study is probably minimal, however.

Carryovers from prior years

Current tax expense reflects not only the tax payable on the current year's operations, but also the utilization of certain carrybacks. For example, when carrybacks of net operating losses are utilized, the current provision is reduced to reflect the net operating loss carryback. Similarly the use of other types of carrybacks and carryforwards, such as the investment tax credit, capital loss, research and development credit, etc., flows through the current tax provision. In contrast, when carryforwards of net operating losses are utilized the benefit is shown as an extraordinary item. Since extraordinary items are not included in this study, the current year's tax rate would not be affected by the carryforward of a net operating loss. To the extent that the effect of carryovers are included in the current provision, the effective tax rate may not represent the tax burden applicable to the current year's operations.

Worldwide operations

Allocation of income between U.S. and foreign sources

The allocation of income between U.S and foreign sources is based on information voluntarily disclosed in the companies' financial statements. Effective for fiscal years beginning after December 15, 1976, Financial Accounting Standards Board Statement No. 14 requires certain disclosures relating to foreign operations. The SEC also requires similar information to be disclosed.

Uniform methods of allocating income between U.S. and foreign sources have not been developed for financial reporting purposes, and corporate administrative, capital and product development costs are subject to arbitrary allocation methods. It is possible that the allocation methods used by some companies in their financial statements are quite different from the allocation methods required under the tax rules. Also, even when income is allocated between U.S. and foreign sources in a manner consistent with the U.S. tax rules, the allocation may be inconsistent with foreign tax rules. Consequently, the U.S. and foreign rates may be distorted by the methods of allocation. Nevertheless, to the extent the allocations are reasonably consistent with the tax allocations, the information is useful in analyzing the effective income tax burden of multinational corporations.

Most companies allocate to foreign source income the unrealized foreign currency exchange gains and losses recognized under FASB Statement No. 8. Net exchange gains typically decrease the current effective tax rate and net exchange losses typically increase the effective tax rate because these amounts may not be reflected in foreign source taxable income. Some companies report high effective foreign tax rates (perhaps in excess of 100 percent) in part because of the recognition of such losses for financial reporting purposes.

Under FASB Statement No. 52, some foreign currency translation adjustments are not included in net income. Although FASB Statement No. 52 is effective for fiscal years beginning on or after December 15, 1983, some companies adopted this treatment of foreign currency gains and losses in 1981. In this study no attempt has been made to evaluate the effect on tax rates of this change in the accounting rules.

Potential overstatement of U.S. tax on U.S. income

The estimated rate of U.S. tax on U.S. income may be overstated to the extent that some portion of the U.S. tax is actually attributable to foreign earnings. This will occur when the foreign tax paid on foreign earnings is less than the U.S. tax on those earnings, so that even after utilization of the foreign tax as a credit against U.S. tax, an incremental U.S. tax is payable on the foreign earnings. Although it is not possible to adjust accurately for this potential overstatement on the basis of publicly available information, the effect on industry rates is unlikely to be material.

APPENDIX B: COMPANIES INCLUDED IN INDUSTRY GROUPS FOR CORPORATE TAX RATE STUDY

Aerospace (SIC Code No. 41)

Boeing
General Dynamics
Lockheed
Martin Marietta
McDonnell Douglas
Rockwell International
Signal Companies
United Technologies

Beverages (SIC Code No. 49)

Anheuser-Busch
Coca-Cola
G. Heileman Brewing Co.
PepsiCo
Joseph E. Seagram & Sons

Broadcasting

American Broadcasting
CBS
MCA
Metromedia
RCA

Chemicals (SIC Code No. 28)

Dow Chemical
E.I. DuPont de Nemours
W.R. Grace
Monsanto
Union Carbide

Computers and Office Equipment (SIC Code No. 44)

Burroughs
Control Data
Digital Equipment
Hewlett-Packard
Honeywell
International Business Machines
Sperry

Construction

Centex
Combustion Engineering
Fluor
Koppers

U.S. Home

Electronics and Appliances (SIC Code No. 36)

AT&T Technologies
General Electric
ITT
Litton Industries
Motorola
North American Philips
Raytheon
Texas Instruments
Westinghouse Electric

Financial Institutions

BankAmerica Corp.
Bank of Boston Corp.
Bankers Trust New York Corp.
Chase Manhattan Corp.
Chemical New York Corp.
Citicorp
Continental Illinois Corp.
Crocker National Corp.
First Bank System
First Chicago Corp.
First Interstate Bancorp.
InterFirst Corp.
Manufacturers Hanover Corp.
Marine Midland Banks
Mellon National Corp.
J.P. Morgan & Co.
Norwest Corp.
Security Pacific Corp.
Texas Commerce Bancshares
Wells Fargo & Co.

Food Processors (SIC Code No. 20)

Archer-Daniels-Midland
Beatrice Foods
Borden
CPC Internatioanl
Consolidated Foods
Dart & Kraft
Esmark
General Foods
General Mills
H.J. Heinz
IC Industries
Nabisco Brands
Ralston Purina

Glass, Concrete, Abrasives, and Gypsum (SIC Code No. 32)

Manville
Owens-Corning
Owens-Illinois

PPG Industries
U.S. Gypsum

Instrument Companies (SIC Code No. 38)

Eastman Kodak
General Signal
Lear Siegler
3M
Xerox

Insurance

Aetna Life & Casualty
CIGNA
Lincoln National
Transamerica
Travelers

Investment Companies

American Express
E.F. Hutton Group
First Boston
Merrill Lynch & Co.
Phibro-Salomon

Metal Manufacturing (SIC Code No. 33)

Aluminum Co. of America
Armco
Bethlehem Steel
LTV
National Intergroup
Reynolds Metals

Metal Products (SIC Code No. 34)

American Can
Continental Group
Crown Cork & Seal
Gillette
National Can

Mining

AMAX
Freeport-McMoran
Inspiration Resources
International Minerals and Chemical
Newmont Mining
North American Coal
Phelps-Dodge
Vulcan Materials
Westmoreland Coal

Motor Vehicles (SIC Code No. 40)

Chrysler
Ford Motor
General Motors

International Harvester
TRW

Paper and Wood Products (SIC Code No. 26)

Boise Cascade
Champion International
Georgia-Pacific
International Paper
Weyerhaeuser

Petroleum (SIC Code Nos. 29 and 10)

Amerada Hess
Ashland Oil
Atlantic Richfield
Charter
Coastal
Exxon
Getty Oil
Gulf Oil
Louisiana Land & Exploration
Kerr-McGee
Mobil
Occidental Petroleum
Phillips Petroleum
Shell Oil
Standard Oil (Indiana)
Standard Oil (Ohio)
Standard Oil of California
Sun
Superior Oil
Tenneco
Texaco
Unocal
Union Pacific

Pharmaceuticals (SIC Code No. 42)

American Home Products
Bristol-Myers
Johnson & Johnson
Merck
Pfizer

Retailing

American Stores
Federated Department Stores
Household International
K mart
Kroger
Lucky Stores
J.C. Penney
Safeway Stores
Sears Roebuck
Southland

Rubber (SIC Code No. 30)

Firestone Tire & Rubber
General Tire & Rubber
B.F. Goodrich
Goodyear Tire & Rubber
Uniroyal

Soaps and Cosmetics (SIC Code No. 43)

Avon Products
Chesebrough-Pond's
Colgate-Palmolive
Procter & Gamble
Revlon

Telecommunications

AT&T
Continental Telecom
GTE
United Telecommunications

Tobacco (SIC Code No. 21)

American Brands
Phillip Morris
R.J. Reynolds Industries

Transportation—Airlines

American Airlines
Delta Air Lines
Eastern Air Lines
Northwest Airlines
Pan American World Airways
Republic Airlines
Tiger International
Trans World
UAL

Transportation—Railroads

Burlington Northern
Chicago & North Western Transportation
CSX
Norfolk Southern
Santa Fe Southern Pacific

Transportation—Trucking

Consolidated Freightways
Leaseway Transportation
Roadway Services
United Parcel Service
Yellow Freight System

Utilities (Electric & Gas)

American Electric Power
Commonwealth Edison

Middle South Utilities
Pacific Gas & Electric
Public Service Electric & Gas
Southern California Edison
Southern Company
Texas Utilities

Wholesalers

Alco Standard
American Hospital Supply
Amfac
Avnet
Fleming Companies
Genuine Parts
McKesson
Super Valu Stores
Sysco

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